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**PATENT APPLICATION**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q67008

**RECEIVED**

TAKENOUCHE, KAZUYA, et al.

**MAY 07 2004**

Appln. No. 10/035,211

Patent No. 6,689,766

**OFFICE OF PETITIONS**

Filed: June 4, 2001

Issued: February 10, 2004

Confirmation No.: 4554

For: VITAMIN D3 DERIVATIVE AND TREATING AGENT FOR INFLAMMATORY  
RESPIRATORY DISEASE USING SAME

**PETITION TO ACCEPT UNINTENTIONALLY DELAYED CLAIM FOR BENEFIT OF  
PRIORITY**

**MAIL STOP PETITIONS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.78(a)(3), Applicants submit a petition to accept the unintentionally delayed claim for benefit of priority in the above-identified patent to International Application No. PCT/JP99/05826, filed on October 22, 1999, in view of the following:

1. The entire delay between the date the claim for benefit of priority was due under 37 C.F.R. § 1.78(a)(2)(ii) and the date that the claim was unintentional.
2. The reference required by 35 U.S.C. § 120 and paragraph 37 C.F.R. § 1.78(a)(2) to the prior filed application is submitted herewith.

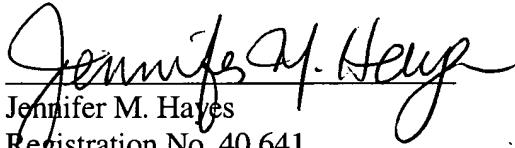
PETITION TO ACCEPT UNINTENTIONALLY  
DELAYED CLAIM FOR BENEFIT OF PRIORITY  
U.S. PATENT 6,689,766

ATTY DOCKET Q67008

3. A Request for Certificate of Correction and the required fee are submitted herewith.

4. A check in the amount of \$1,330.00 for the required surcharge under 37 C.F.R. § 1.17(t) is enclosed.

Respectfully submitted,

  
Jennifer M. Hayes  
Registration No. 40,641

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE  
23373  
CUSTOMER NUMBER

Date: May 4, 2004



<p>(51) 国際特許分類7 C07C 401/00, C07F 7/18, A61K 31/59, A61P 3/02, 3/14, 11/00</p>		A1	<p>(11) 国際公開番号 WO00/24712</p> <p>(43) 国際公開日 2000年5月4日(04.05.00)</p>
(21) 国際出願番号  (22) 国際出願日  (30) 優先権データ 特願平10/302321 特願平10/362827 特願平10/365207 特願平10/365208 特願平10/365209	PCT/JP99/05826  1999年10月22日(22.10.99)  1998年10月23日(23.10.98) JP 1998年12月21日(21.12.98) JP 1998年12月22日(22.12.98) JP 1998年12月22日(22.12.98) JP 1998年12月22日(22.12.98) JP		<p>石塚誠一(ISHIZUKA, Seiichi)[JP/JP] 〒191-0065 東京都日野市旭が丘4丁目3番2号 帝人株式会社 東京研究センター内 Tokyo, (JP)</p> <p>(74) 代理人 前田純博(MAEDA, Sumihiro) 〒100-0011 東京都千代田区内幸町2丁目1番1号 帝人株式会社 知的財産センター内 Tokyo, (JP)</p> <p>(81) 指定国 AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, 欧州特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI特許 (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG), ARIPO特許 (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), ユーラシア特許 (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM)</p>
<p>(71) 出願人 (米国を除くすべての指定国について) 帝人株式会社(TEIJIN LIMITED)[JP/JP] 〒541-0054 大阪府大阪市中央区南本町1丁目6番7号 Osaka, (JP)</p> <p>(72) 発明者 ; および (75) 発明者 / 出願人 (米国についてのみ) 竹之内一弥(TAKENOUCHI, Kazuya)[JP/JP] 高 清志(GAO, Qingzhi)[CN/JP] 真鍋健次(MANABE, Kenji)[JP/JP] 十川 亮(SOGAWA, Ryo)[JP/JP] 高野泰宏(TAKANO, Yasuhiro)[JP/JP]</p>			<p>添付公開書類 国際調査報告書</p>
<p>(54) Title: VITAMIN D<sub>3</sub> DERIVATIVES AND REMEDIES FOR INFLAMMATORY RESPIRATORY DISEASES CONTAINING THE SAME</p> <p>(54) 発明の名称 ビタミンD<sub>3</sub>誘導体およびそれを用いる炎症性呼吸器疾患治療剤</p>			
<p>(1) </p> <p>(1-1) </p> <p>(1-2) </p> <p>(1-3) </p> <p>(1-4) </p> <p>(1-5) </p>			
<p>(57) Abstract Compounds represented by general formula (1), wherein R<sub>01</sub> and R<sub>02</sub> are each independently hydrogen or a hydroxyl-protecting group; and Z is a group represented by general formula (1-1), (1-2), (1-3), (1-4) or (1-5). These compounds are useful as active ingredients of the remedies for inflammatory respiratory diseases, malignant tumor, articular rheumatism, osteoporosis, true diabetes, hypertension, alopecia, acne, psoriasis, dermatitis, hypercalcemia, hypofunction of accessory thyroid, or metabolic disorder of cartilage.</p>			

# Declaration and Power of Attorney for Patent Application

## 特許出願宣言書及び委任状

### Japanese Language Declaration

#### 日本語宣言書

下の氏名の発明者として、私は以下の通り宣言します。

私の住所、私書箱、国籍は下記の私の氏名の後に記載された通りです。

下記の名称の発明について請求範囲に記載され、特許出願している発明内容について、私が最初かつ唯一の発明者（下記の氏名が一つの場合）もしくは最初かつ共同発明者であると（下記の名称が複数の場合）信じています。

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

"VITAMIN D<sub>3</sub> DERIVATIVE AND TREATING  
AGENT FOR INFLAMMATORY RESPIRATORY  
DISEASE USING SAME"

上記発明の明細書（下記の欄でx印がついていない場合は、本書に添付）は、

一月一日に提出され、米国出願番号または特許協定条約国際出願番号を\_\_\_\_\_とし、  
(該当する場合) \_\_\_\_\_に訂正されました。

私は、特許請求範囲を含む上記訂正後の明細書を検討し、内容を理解していることをここに表明します。

私は、連邦規則法典第37編第1条56項に定義されるとおり、特許資格の有無について重要な情報を開示する義務があることを認めます。

the specification of which is attached hereto unless the following box is checked:

was filed on October 22, 1999  
as United States Application Number or PCT  
International Application Number  
PCT/JP99/05826 and was amended on  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

In re: Kazuya TAKENOUCHI, et al  
Patent No. 6,689,766  
Filed: February 10, 2004  
Atty Dkt: Q67008  
ATTACHMENT B

# Japanese Language Declaration

## 日本語宣言書

私は、米国法典第35編119条(a)-(d)項又は365条(b)項に基づき下記の、米国以外の国の少なくとも一ヵ国を指定している特許協力条約365(a)項に基づく国際出願、又は外国での特許出願もしくは発明者証の出願についての外国優先権をここに主張するとともに、優先権を主張している。本出願の前に出願された特許または発明者証の外国出願を以下に、枠内をマークすることで、示しています。

### Prior foreign application(s) 外国での先行出願

10-302321 (Number) (番号)	Japan (Country) (国名)
10-362827 (Number) (番号)	Japan (Country) (国名)
10-365207 (Number) (番号)	Japan (Country) (国名)

私は、第35編米国法典119条(e)項に基づいて下記の米国特許出願規定に記載された権利をここに主張いたします。

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

私は、下記の米国法典第35編120条に基いて下記の米国特許出願に記載された権利、又は米国を指定している特許協力条約365条(c)に基づく権利をここに主張します。また、本出願の各請求範囲の内容が米国法典第35編112条第1項又は特許協力条約で規定された方法で先行する米国特許出願に開示されていない限り、その先行米国出願の提出日以降で本出願の日本国内または特許協力条約国提出日までの期間に入手された、連邦規則法典第37編1条56項で定義された特許資格の有無に関する重要な情報について開示義務があることを認識しています。

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

私は、私自身の知識に基づいて本宣言書中で私が行なう表明が真実であり、かつ私の入手した情報と私の信じるところに基づく表明が全て真実であると信じていること、さらに故意になされた虚偽の表明及びそれと同等の行為は米国法典第18編第1001条に基づき、罰金または拘禁、もしくはその両方により処罰されること、そしてそのような故意による虚偽の声明を行なえば、出願した、又は既に許可された特許の有効性が失われることを認識し、よってここに上記のごく宣誓を致します。

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

### Priority Not Claimed 優先権主張なし

23/October/1998 (Day/Month/Year Filed) (出願年月日)	<input type="checkbox"/>
21/December/1998 (Day/Month/Year Filed) (出願年月日)	<input type="checkbox"/>
22/December/1998 (Day/Month/Year Filed) (出願年月日)	<input type="checkbox"/>

I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

(Application No.) (出願番号)	(Filing Date) (出願日)
-----------------------------	------------------------

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Status)(patented, pending, abandoned) (現況：特許可済、保属中、放棄済)
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(Status)(patented, pending, abandoned) (現況：特許可済、保属中、放棄済)
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

# Japanese Language Declaration

## 日本語宣言書

委任状： 私は下記の発明者として、本出願に関する一切の手続きを米特許商標局に対して遂行する弁理士または代理人として、下記の者を指名いたします。（弁護士、または代理人の氏名及び登録番号を明記のこと）

John H. Mion, Reg. No. 18,879; Thomas J. Macpeak, Reg. No. 19,292; Robert J. Seas, Jr., Reg. No. 21,092; Darryl Mexic, Reg. No. 23,063; Robert V. Sloan, Reg. No. 22,775; Peter D. Olexy, Reg. No. 24,513; J. Frank Osha, Reg. No. 24,625; Waddell A. Biggart, Reg. No. 24,861; Louis Gubinsky, Reg. No. 24,835; Neil B. Siegel, Reg. No. 25,200; David J. Cushing, Reg. No. 28,703; John R. Inge, Reg. No. 26,916; Joseph J. Ruch, Jr., Reg. No. 26,577; Sheldon I. Landsman, Reg. No. 25,430; Richard C. Turner, Reg. No. 29,710; Howard L. Bernstein, Reg. No. 25,665; Alan J. Kasper, Reg. No. 25,426; Kenneth J. Burchfiel, Reg. No. 31,333; Gordon Kit, Reg. No. 30,764; Susan J. Mack, Reg. No. 30,951; Frank L. Bernstein, Reg. No. 31,484; Mark Boland, Reg. No. 32,197; William H. Mandir, Reg. No. 32,156; Brian W. Hannon, Reg. No. 32,778; Abraham J. Rosner, Reg. No. 33,276; Bruce E. Kramer, Reg. No. 33,725; Paul F. Neils, Reg. No. 33,102; Brett S. Sylvester, Reg. No. 32,765; Robert M. Masters, Reg. No. 35,603; George F. Lehnigk, Reg. No. 36,359; John T. Callahan, Reg. No. 32,607 and Steven M. Gruskin, Reg. No. 36,818.

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: (list name and registration number)

### 書類送付先

Send Correspondence to:  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W. Suite 800  
Washington, D.C. 20037-3213

### 直接電話連絡先：（名前及び電話番号）

Direct Telephone Calls to:  
(202)293-7060

第一または第一発明者名	Full name of sole or first inventor Kazuya TAKENOUCHI	
発明者署名	Inventor's signature <i>Kazuya Takenouchi</i> Date March 9, 2001	
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Japanese	
私書箱	Post Office Address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	
第二共同発明者	Full name of second joint inventor, if any Qingzhi GAO	
第二共同発明者署名	Second inventor's signature <i>Qingzhi Gao</i> Date March 9, 2001	
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Chinese	
私書箱	Post Office Address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	

(第三以降の共同発明者についても同様に記載し、署名をすること)

(Supply similar information and signature for third and subsequent joint inventors.)

# Japanese Language Declaration

## 日本語宣言書

第三の共同発明者の氏名（該当する場合）	Full name of third joint inventor, if any Kenji MANABE	
同第三発明者の署名	日付	Third inventor's signature Kenji Manabe Date March 9, 2001
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Japanese	
郵便の宛先	Post office address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	
第四の共同発明者の氏名（該当する場合）		
同第四発明者の署名	日付	Fourth inventor's signature Ryo Sogawa Date March 9, 2001
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Japanese	
郵便の宛先	Post office address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	
第五の共同発明者の氏名（該当する場合）		
同第五発明者の署名	日付	Fifth inventor's signature Yasuhiro Takano Date March 9, 2001
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Japanese	
郵便の宛先	Post office address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	
第六の共同発明者の氏名（該当する場合）		
同第六発明者の署名	日付	Sixth inventor's signature Seiichi Ishizuka Date March 9, 2001
住所	Residence TOKYO, JAPAN	
国籍	Citizenship Japanese	
郵便の宛先	Post office address c/o Teijin Limited, Tokyo Research Center, 3-2, Asahigaoka 4-chome, Hino-shi, TOKYO, 191-0065 JAPAN	

# Japanese Language Declaration

日本語宣言書

## Supplemental Priority Data Sheet

<b>Additional prior foreign applications:</b>			
Number (番号) 10-365208 10-365209	Country (国名) Japan Japan	Day/Month/Year Filed (出願年月日) 22/December/1998 22/December/1998	Priority Not Claimed <input type="checkbox"/> <input type="checkbox"/>
<b>Additional provisional applications:</b>			
Application Number (出願番号)	Filing Date (出願日)		
<b>Additional U.S. applications:</b>			
Application Number (出願番号)	Filing Date (出願日)	Status (patented, pending, abandoned) (現況: 特許許可済、保属中、放棄済)	